

**REMARKS**

This is in response to the Office Action dated January 27, 2005. Claims 1-20 are pending.

Claim 1 stands rejected as being allegedly anticipated by Terui. This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 as amended requires "a plurality of spaced apart through electrodes with equal cross-sectional areas in a semiconductor chip linking a front surface of the chip to a back surface of the chip, a first number of the plurality of through electrodes being electrically connected to one another to form a first high-current through electrode which links the front and back surfaces of the chip and is in communication with a power supply, a second number of the plurality of through hole electrodes being electrically connected to one another to form a second high-current through electrode which links the front and back surfaces of the chip and is in communication with ground, and wherein a particular signal-routing through electrode is formed of only one of the plurality of through electrodes; and wherein at least one of the first number and the second number is two or greater, so that at least one of the first high-current through electrode and the second high-current through electrode is made up of at least two of the through electrodes which are electrically connected to one another." The cited art fails to disclose or suggest at least these underlined features of claim 1.

Terui discloses only electrodes (e.g., 181, 183, 285, 287, 81, 83, 85, 87) disposed in a line of the surface of a semiconductor device (col. 8, lines 15-25; Figs. 5A-6). These electrodes in Terui are commonly connected to terminals by a plurality of bonding wires (col. 8, lines 33-55). In other words, the electrodes on the surface in Terui are not through electrodes which link front and back surfaces of a chip. In particular, none of electrodes 181, 183, 285 or 287 in Terui

KIMURA et al  
Appl. No. 10/668,166  
April 27, 2005

extend through the chip 60 to link front and back surfaces thereof. Thus, these electrodes are not through electrodes as called for in claim 1. Terui is entirely unrelated to the invention of claim 1 in this respect.

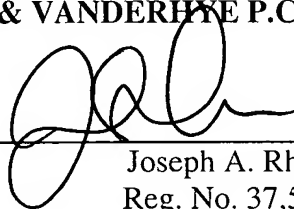
Terui also fails to disclose or suggest the through electrodes of the other claims.

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

**NIXON & VANDERHYTE P.C.**

By: \_\_\_\_\_



Joseph A. Rhoa  
Reg. No. 37,515

JAR:caj  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100